

9-16-14

TCEP Linearity Study

Experiment Overview

In order to ascertain whether TCEP (tris(2-carboxyethyl)phosphine) would contribute significant amount of noise to our of current signal, we created an NADH curve at 0, 250, 500, and 1000 μM with three concentrations of TCEP (0 μM , 50 μM , and 100 μM) and assessed whether 1. the curve had unreasonable levels of noise and 2. whether the curve resembled previous NADH curves without TCEP.

Each curve represents the how 3 different concentrations of TCEP (0 μM , 1 μM , and 10 μM) affect the linearity of the NADH standard curve.

Three linear NADH curves were generated with all three concentrations of TCEP. Therefore, for future experiments we decided to use the highest concentration, 10 μM TCEP, for enzyme stabilization.